

U.S. Appln. No. 09/818,399
Reply to Office Action dated March 15, 2006

PATENT
450100-03044

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Previously Presented) An image synthesizing apparatus for synthesizing two images, comprising:

coefficient setting means for setting a blending coefficient α ($0 \leq \alpha \leq 1$) at a specified value proportional to a value of a specific picture element component included in picture element components A of a first image when said value of the specific picture element is not zero,

wherein said specified value is set to zero when said value of the specified picture element is zero; and

arithmetic means for performing an operation on said picture element components A, picture element components B of a second image, and said blending coefficient α as follows:

$$A * \alpha + B * (1 - \alpha)$$

and performing said operation on all the picture element components A and the picture element components B of a picture element that has the specific picture element component representing the predetermined value by using said blending coefficient α set by said coefficient setting means.

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2. (Previously Presented) An image synthesizing apparatus as claimed in claim 1,
wherein a value that is outside a specified range of values that can be assumed by said specific picture element component and does not affect display of said first image is recorded at said specified value in said operation.

3. (Original) An image synthesizing apparatus as claimed in claim 1,
wherein specific picture element component is a luminance component.

4. (Original) An image synthesizing apparatus as claimed in claim 1,
wherein said coefficient setting means sets said blending coefficient α at zero when said specific picture element component is zero, and sets said blending coefficient α at unity when said specific picture element component is other than zero.

5. (Original) An image synthesizing apparatus as claimed in claim 1,
wherein said coefficient setting means sets said blending coefficient α at zero when said specific picture element component is zero, and sets said blending coefficient α at a specified value that satisfies $0 < \alpha \leq 1$ when said specific picture element component is other than zero.

6. (Original) An image synthesizing apparatus as claimed in claim 1,

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wherein data of said first image and data of said second image are data in an ITU-R601 format having a luminance component and a color difference component as said picture element components A and said picture element components B, respectively.

7. (Previously Presented) An image synthesizing method for synthesizing two images, said method comprising the steps of:

setting a blending coefficient α to a specified value proportional to a value of a specific picture element component included in picture element components A of a first image when said value of the specific picture element is not zero,

wherein said specified value is set to zero when said value of the specified picture element is zero; and

performing an operation on picture element components A of the first image, picture element components B of a second image, and the blending coefficient α ($0 \leq \alpha \leq 1$) as follows:

$$A * \alpha + B * (1 - \alpha).$$

8. (Previously Presented) The image synthesizing apparatus according to claim 1,

wherein the specific picture element component is a color component or a color difference component when image data includes a color component or a color difference component.

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9. (Previously Presented) The image synthesizing apparatus according to claim 1,

wherein a relationship between the specific picture element component and the blending coefficient is preset in an image generation means.

10. (Previously Presented) The image synthesizing apparatus according to claim 1,

wherein a relationship between the specific picture element component and the blending coefficient is selected by a user.

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